UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,479	11/05/2003	Kyoung-Won Kim	1572.1170	7746
21171 STAAS & HAI	7590 02/10/200 SEY LLP	EXAMINER		
SUITE 700		FEARER, MARK D		
WASHINGTO	RK AVENUE, N.W. N, DC 20005	ART UNIT	PAPER NUMBER	
			2443	
			MAIL DATE	DELIVERY MODE
			02/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Communication		Application	on No.	Applicant(s)				
		10/700,4	79	KIM ET AL.				
	Office Action Summary	Examine		Art Unit				
		MARK D.		2443				
Period fo	The MAILING DATE of this communication or Reply	n appears on the	e cover sheet with the d	correspondence ad	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILIN asions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communicatio p period for reply is specified above, the maximum statutory pre to reply within the set or extended period for reply will, by steply received by the Office later than three months after the red patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THE FR 1.136(a). In no even. In. eriod will apply and westatute, cause the app	HIS COMMUNICATION ent, however, may a reply be tir ill expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this of (35 U.S.C. § 133).	•			
Status								
1) 又	Responsive to communication(s) filed on a	18 November 2	008					
-	Responsive to communication(s) filed on <u>18 November 2008</u> . This action is FINAL . 2b) This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٥/ا	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	on of Claims							
4)⊠	4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.							
-	4a) Of the above claim(s) is/are withdrawn from consideration.							
	is/are allowed.							
	6)⊠ Claim(s) <u>1-19</u> is/are rejected.							
	Claim(s) is/are objected to.							
-	Claim(s) are subject to restriction a	nd/or election r	equirement.					
	ion Papers							
	•	miner						
9) ☐ The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
	under 35 U.S.C. § 119							
	Acknowledgment is made of a claim for for	roign priority un	dor 25119 C & 110/a) (d) or (f)				
	_	eigh phonty un	uei 33 0.3.0. § 119(a)-(u) 01 (1).				
a)	a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen			 □	(DTO 412)				
1) Notice of References Cited (PTO-892) A) Interview Summary (PTO-413) Discrete of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date								
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application								
Paper No(s)/Mail Date 6) Other:								

DETAILED ACTION

- 1. Applicant's Amendment filed 18 November 2008 is acknowledged.
- 2. Claims 1, 5, 9, and 19 have been amended.
- 3. Claims 2, 6, and 12 have been cancelled.
- **4.** Claims 1, 3-5, 7-11, and 13-19 are still pending in the present application.
- **5.** This action is made FINAL.

Claim Rejections - 35 USC § 103

- **6.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2443

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Page 3

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 1, 3-5, and 7-11, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nouri et al. (US 6065053 A) in view of lavergne et al. (US 7181517 B1) and in further view of Carmello et al. (US 6425000 B1).

Consider claim 1. Nouri et al. discloses a remote control system of controlling an electronic appliance through the Internet (("One embodiment of the present invention facilitates remotely powering-on and powering-off of the server system by use of a client computer.") column 5 lines 13-15), comprising: an electronic appliance comprising: a telephone network accessing unit, which is accessible with a proper telephone number of the electronic appliance (("The client computer may be local to the server system, or may be at a location remote from the server system, in which case a pair of modems are utilized to provide communication between the client computer and the server system. A remote interface board connects to the server and interfaces to the server modem.") column 5 lines 15-20 and Figures 4A and 4B), a power supplying unit, and a

controller controlling the power supplying unit so that the electronic appliance is supplied with driving power according to a telephone signal received through the telephone network accessing unit ("At the completion of the power-on operation by the Chassis controller 170, the Recovery Manager 130 sends a read status command to the Chassis controller (using states 304 and 306) to retrieve information on the results of the operation.") column 14 lines 54-58); and a remote control server comprising: a telephone number database to store the proper telephone number of the electronic appliance (("The System Recorder memory 112 may also store identification of components of the server system.") column 20 lines 22-24), a telephone signal transmitting unit to transmit the telephone signal to the electronic appliance (("After successful modem communication has been established and the password confirmed at state 436, or at the completion of checking the password at state 442, process 420 continues at state 446.") column 16 lines 52-55), and a server controlling unit to read out the proper telephone number of the electronic appliance from the telephone number database according to a selection of power control of the electronic appliance by a user making an access thereto through the Internet, to control the telephone signal transmitting unit, and to supply the telephone signal to the telephone network accessing unit of the selected electronic appliance having the read proper telephone number through the telephone network so that power of the selected electronic appliance is enabled (("Incoming messages are handled based on interrupt, where a first byte of an incoming message is the Slave Address which is checked by all controllers connected to the microcontroller bus 160 (FIG. 2). Whichever microcontroller has the matched ID

Art Unit: 2443

would respond with an acknowledgement to the sender controller.") column 12 lines 66-67 and column 13 lines 1-4). However, Nouri et al. fail to disclose a remote control system comprising a remote user terminal. lavergne et al. discloses a browser enabled remote user interface (("The present invention provides a remote user interface system that will allow a remote browser application to monitor and control the power system from anywhere in the world. The interface system further supports a local user interface, such as in the form of a liquid crystal display screen and touchpad interface, to provide the same information that is available through the remote browser. Preferably the local interface and the remote browser interface are configured as a series of menu screens providing both static and dynamic (real-time) information. Preferably the screens of the remote browser interface and the local interface are of the same or similar layout so that the user of the remote browser interface will be familiar with the local interface, and vice versa.") column 2 lines 5-18). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a browser enabled remote user interface as taught by lavergne et al. with a remote control system of controlling an electronic appliance through the Internet as taught by Nouri et al. for the purpose of a remote control communications system. However, Nouri et al., as modified by lavergne et al., fails to teach a ring tone of dual-tone multi-frequency (DTMF). Carmello et al. discloses a system wherein the triggering circuit has the ability to transmit DTMF tones (("In addition, the advanced ring detection and triggering circuit 16A has the ability to transmit DTMF (Dual Tone Multi-Frequency) tones back onto the

Page 5

phone line 24 in order to signal the remote user that the triggering operation has been carried out by the host system 10.") column 9 lines 12-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the system using dual-tone multi-frequency as taught by Carmello et al. with the system of a modern dialing a remote server as taught by Nouri et al., as modified by lavergne et al., for the purpose of using a telephone ring tone to trigger an event.

Consider claim 3, and as applied to claim 1 above. Nouri et al., as modified by lavergne et al. and Carmello et al., discloses a remote control system where user identification is stored and access is authenticated (("Moving to state 292, the remote interface 104 is connected with the server 100. The previously entered password (at state 273) is sent to the remote interface 104 to identify the user at the local computer 122. If the password matches a password that is stored in the server system 100, the communication path with the remote interface is enabled.") Nouri et al., column 13 line 67 and column 14 lines 1-6).

Consider claim 4, and as applied to claim 1 above. Nouri et al., as modified by lavergne et al. and Carmello et al., discloses a system of remote control via the internet (("In another embodiment, the server modem to client modem connection may be implemented by an Internet connection utilizing the well known TCP/IP protocol. Any of several Internet access devices, such as modems or network interface cards, may be utilized. Thus, the communications network 127 may utilize either circuit or packet switching.") Nouri et al., column 7 lines 38-44).

Consider claim 5. Nouri et al., as modified by Carmello et al., discloses a remote control method of controlling an electronic appliance through the Internet (("In another embodiment, the server modem to client modem connection may be implemented by an Internet connection utilizing the well known TCP/IP protocol.") column 7 lines 38-40), comprising: storing a proper telephone number of the electronic appliance in a remote control server (("The first block is a memory block which stores ID codes of the devices installed in the network.") column 22 lines 44-46); allowing a user to access the remote control server through the Internet (("If modem is selected, the user is requested to enter a telephone number to be used in dialing the server modem.")); and controlling the electronic appliance to enable a power thereof by reading out the stored proper telephone number of the electronic appliance that is selected according to a selection of power control of the electronic appliance by the user accessing the remote control server and by supplying a telephone signal to the selected electronic appliance having the proper telephone number through a telephone network (("A remote interface board connects to the server and interfaces to the server modem. Recovery manager software is loaded on the client computer to control the power-on and power-off processes and to provide feedback to a user though a graphical user interface.")). However, Nouri et al., as modified by Carmello et al., fail to disclose a remote control method comprising a remote user terminal. lavergne et al. discloses a browser enabled remote user interface (("The present invention provides a remote user interface system that will allow a remote browser application to monitor and control the power system from anywhere in the world. The interface system further supports a local user interface, such as in the

form of a liquid crystal display screen and touchpad interface, to provide the same information that is available through the remote browser. Preferably the local interface and the remote browser interface are configured as a series of menu screens providing both static and dynamic (real-time) information. Preferably the screens of the remote browser interface and the local interface are of the same or similar layout so that the user of the remote browser interface will be familiar with the local interface, and vice versa.") column 2 lines 5-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a browser enabled remote user interface as taught by lavergne et al. with a remote control method of controlling an electronic appliance through the Internet as taught by Nouri et al., as modified by Carmello et al., for the purpose of a remote control communications system.

Consider claim 7, and as applied to claim 5 above. Nouri et al., as modified by lavergne et al. and Carmello et al., discloses a method of remote control where user identification is stored and access is authenticated (("Moving to state 292, the remote interface 104 is connected with the server 100. The previously entered password (at state 273) is sent to the remote interface 104 to identify the user at the local computer 122. If the password matches a password that is stored in the server system 100, the communication path with the remote interface is enabled.") Nouri et al., column 13 line 67 and column 14 lines 1-6).

Consider claim 8, and as applied to claim 5 above. Nouri et al., as modified by lavergne et al. and Carmello et al., discloses a method of remote control via the internet

(("In another embodiment, the server modem to client modem connection may be implemented by an Internet connection utilizing the well known TCP/IP protocol. Any of several Internet access devices, such as modems or network interface cards, may be utilized. Thus, the communications network 127 may utilize either circuit or packet switching.") Nouri et al., column 7 lines 38-44).

Regarding claim 9, Nouri et al. discloses a system to remotely control a server via a terminal and an internet connection (("Moving to state 298, the server window panel 928 is then displayed to the user.") column 14 lines 18-19), IDs and passwords (column 12 line 65 – column 13 line 43). However, Nouri et al. fails to teach a plurality of remotely controlled devices or a database of telephone numbers or DTMF. Carmello et al. discloses a system wherein a server contains a list of multiple computer systems that can receive a signal ("According to another aspect of the present invention, a method is disclosed for a remote user to select and trigger a host system to connect to the Internet by connecting to a network server, such as a Web Server, wherein the Web Server includes a list of host computer systems that can be triggered for connection to the Internet by the network server, and wherein the remote user selects the host system to be triggered and the network server dials a phone number associated with a phone line connected to the host system, thereby triggering the host computer system to execute a predetermined program which causes the host system to connect to the Internet.") column 4 lines 66-67 and column 5 lines 1-10) and an organized database that is used to determine whether to trigger a specific host system to connect to the internet by dialing a phone number associated with the system (("The information stored in the Raw

Page 10

Art Unit: 2443

Access Log 114 and the Organized Database 122 is used by the Database Decision Module 116 to determine whether to trigger a specific host system 10 to connect to the Internet by dialing a phone number associated with the system.") column 12 lines 43-47) and a system wherein the triggering circuit has the ability to transmit DTMF tones (("In addition, the advanced ring detection and triggering circuit 16A has the ability to transmit DTMF (Dual Tone Multi-Frequency) tones back onto the phone line 24 in order to signal the remote user that the triggering operation has been carried out by the host system 10.") column 9 lines 12-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the system that can signal multiple computers and a database of telephone numbers, user IDs, and passwords and DTMF as taught by Carmello et al. with the remote control server as taught by Nouri et al. for the purpose of a server, including a local terminal, that can remotely control a plurality of clients via the internet and dialed phone numbers. In the related field of endeavor, client / server systems the unix operating system can remotely access one another via the TCP/IP protocol over the internet or the KERMIT program using modems. However, Nouri et al., as modified by Carmello et al., fails to disclose a remote server system comprising a remote user terminal. lavergne et al. discloses a browser enabled remote user interface (("The present invention provides a remote user interface system that will allow a remote browser application to monitor and control the power system from anywhere in the world. The interface system further supports a local user interface, such as in the form of a liquid crystal display screen and touchpad interface, to provide the same information that is available through the remote browser.

Preferably the local interface and the remote browser interface are configured as a series of menu screens providing both static and dynamic (real-time) information.

Preferably the screens of the remote browser interface and the local interface are of the same or similar layout so that the user of the remote browser interface will be familiar with the local interface, and vice versa.") column 2 lines 5-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a browser enabled remote user interface as taught by lavergne et al. with a local server system capable of remote access as taught by Nouri et al., as modified by Carmello et al, for the purpose of a remote control communications system.

Regarding claim 10, and as applied to claim 9 above, Nouri et al., as modified by lavergne et al., further discloses a system of remote control of a server via the internet and a local terminal (("Moving to state 298, the server window panel 928 is then displayed to the user.") Nouri et al., column 14 lines 18-19 ("In another embodiment, the server modem to client modem connection may be implemented by an Internet connection utilizing the well known TCP/IP protocol. Any of several Internet access devices, such as modems or network interface cards, may be utilized. Thus, the communications network 127 may utilize either circuit or packet switching.") Nouri et al., column 7 lines 38-44). However, Nouri et al., as modified by lavergne et al., fails to teach a plurality of client devices. Carmello et al. discloses a system wherein the user can select one of a plurality of remote devices (("According to another aspect of the present invention, a method is disclosed for a remote user to select and trigger a host

system to connect to the Internet by connecting to a network server, such as a Web Server, wherein the Web Server includes a list of host computer systems that can be triggered for connection to the Internet by the network server, and wherein the remote user selects the host system to be triggered and the network server dials a phone number associated with a phone line connected to the host system, thereby triggering the host computer system to execute a predetermined program which causes the host system to connect to the Internet.") column 4 lines 66-67 and column 5 lines 1-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the plurality of devices as taught by Carmello et al. with remote internet selection as taught by Nouri et al., as modified by lavergne et al., for the purpose of a user being able to select from a plurality of remote devices connected over the internet and displayed back to the local user terminal. An example of this could be a commercial backup system that is available for the Windows or the unix operating system where remote tape libraries can be administered from a graphical user interface on the master server.

Regarding claim 11, and as applied to claim 10 above, Nouri et al., as modified by lavergne et al. and Carmello et al., further discloses a system that displays power status, time of control, and results of the operation (("Initialization, modification and retrieval of system conditions is performed through utilization of a remote interface by issuing commands to the environmental processors. The system conditions may include system log size, presence of faults in the system log, serial number for each of the environmental processors, serial numbers for each power supply of the system, system

Page 13

Art Unit: 2443

identification, system log count, power settings and presence, canister presence, temperature, BUS/CORE speed ratio, fan speeds, settings for fan faults, LCD display, Non-Maskable Interrupt (NMI) request bits, CPU fault summary, FRU status, JTAG enable bit, system log information, remote access password, over-temperature fault, CPU error bits, CPU presence, CPU thermal fault bits, and remote port modem. The aforementioned list of capabilities provided by the present environmental system is not all-inclusive.") Nouri et al., column 5 lines 38-53 ("Each device connected to the bus is software addressable by a unique address and simple master/slave relationships exist at all times; masters can operate as master-transmitters or as master-receivers.") Nouri et al., column 9 lines 44-47 ("Moving to state 312, the response generated by the server is then sent to the remote interface 104. In one embodiment, the microcontroller (the Chassis controller 170 in this instance) performing the command at the server returns status at the time of initiation of communication with the microcontroller.") Nouri et al., column 14 lines 49-54 ("At the completion of the power-on operation by the Chassis controller 170, the Recovery Manager 130 sends a read status command to the Chassis controller (using states 304 and 306) to retrieve information on the results of the operation.") Nouri et al., column 14 lines 54-58).

Regarding claim 13, and as applied to claim 9 above, Nouri et al., as modified by lavergne et al., further discloses a system wherein the remote server comprises a local display (("By such signals, the microcontroller network 102, for example, turns on or turns off power to the server components, resets the server system, turns the system cooling fans to high, low or off, provides system operating parameters to the Basic

Input/Output System (BIOS), transfers power-on self test (POST) events information from the BIOS, and/or sends data to a system display panel and remote computers.")

Nouri et al., column 12 lines 53-60). However, Nouri et al., as modified by lavergne et al., fails to teach a plurality of remote devices. Carmello et al. discloses a system of remotely controlled devices that are associated with a telephone number (("According to another aspect of the present invention, a method is disclosed for a remote user to select and trigger a host system to connect to the Internet by connecting to a network server, such as a Web Server, wherein the Web Server includes a list of host computer systems that can be triggered for connection to the Internet by the network server, and wherein the remote user selects the host system to be triggered and the network server dials a phone number associated with a phone line connected to the host system, thereby triggering the host computer system to execute a predetermined program which causes the host system to connect to the Internet.") column 4 lines 66-67 and column 5 lines 1-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the plurality of remotely controlled devices as taught by Carmello et al. with the remote server comprising a local display as taught by Nouri et al., as modified by lavergne et al., for the purpose of a user terminal displaying output of a plurality of remote devices. As in the example mentioned above, this could be a commercial backup system that is available for the Windows or the unix operating system where remote tape libraries can be administered from a

Art Unit: 2443

graphical user interface (GUI) on the master server. The GUI may designate the client tape libraries by name, IP address, vendor, picture symbol icon, etc.

Page 15

Regarding claim 14, and as applied to claim 9 above, Nouri et al., as modified by lavergne et al., further discloses a system wherein a server can remotely control a client computer via a modem connection, powering it on and off (("The client computer ... may be at a location remote from the server system, in which case a pair of modems are utilized to provide communication between the client computer and the server system. A remote interface board connects to the server and interfaces to the server modem.") Nouri et al., column 5 lines 15-20 ("One embodiment of the present invention facilitates remotely powering-on and powering-off of the server system by use of a client computer.") Nouri et al., column 5 lines 13-15 ("One embodiment of the present invention is a system for resetting a computer, the system comprising: a first computer; a microcontroller capable of providing a reset signal to the first computer; a remote interface connected to the microcontroller; and a second computer connected to the first computer via the remote interface and communicating a reset command to the microcontroller.") Nouri et al., column 3 lines 55-61). However, Nouri et al., as modified by lavergne et al., fails to teach a plurality of client devices that are associated with unique telephone numbers. Carmello et al. discloses a system comprising multiple clients that are associated with a telephone number in a stored database (("The information stored in the Raw Access Log 114 and the Organized Database 122 is used by the Database Decision Module 116 to determine whether to trigger a specific host

system 10 to connect to the Internet by dialing a phone number associated with the system.") column 12 lines 43-47).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the plurality of remote clients with their own telephone numbers as taught by Carmello et al. with the remote control server as taught by Nouri et al., as modified by lavergne et al., for the purpose of a server that can remotely power on and off a client computer via a modem connection. As taught by Carmello et al., remotely controlling the actions of a host computer system using a telephone connection, particularly in triggering a predetermined program, sequence of events, or series of actions at the host system is well known in the field of endeavor. Such a sequence of events could be, for example, a script of commands which cause the host computer system to connect to the Internet for subsequent access by a remotely located user (column 1 lines 9-17).

Regarding claim 15, and as applied to claim 14 above, Nouri et al., as modified by lavergne et al., further discloses a system wherein a server can remotely control a client computer via a modem connection, powering it on and off ("One embodiment of the present invention facilitates remotely powering-on and powering-off of the server system by use of a client computer.") Nouri et al., column 5 lines 13-15. However, Nouri et al., as modified by lavergne et al., fails to teach of a ring signal capable of 'waking' a device. Carmello et al. discloses a system wherein a telephone ring tone activates power (("When a telephone call is detected on the phone line connected to the ring

detector, the power switch is activated and the host computer's power supply is connected to the power outlet.") column 1 lines 55-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a telephone signal ring tone as taught by Carmello et al. with the remote control client / server as taught by Nouri et al., as modified by lavergne et al., for the purpose of using a telephone ring tone to trigger an event.

Regarding claim 16, and as applied to claim 14 above, Nouri et al., as modified by lavergne et al., further discloses a system wherein a server can remotely control a client computer via a modem connection, powering it on and off ("One embodiment of the present invention facilitates remotely powering-on and powering-off of the server system by use of a client computer.") Nouri et al., column 5 lines 13-15. However, Nouri et al., as modified by lavergne et al., fails to teach the dual-tone multi-frequency (DTMF) protocol. Carmello et al. discloses a system using DTMF signaling (("After the control monitor program 12 has executed the selected script 14, a signal is sent to the advanced control unit 16A indicating that a script has been triggered. The microcontroller 100 receives this signal and then transmits a specific tone or sequence of tones using the DTMF transceiver 96 and DAA circuit 90 back onto the phone line 24, indicating to the remote user that the selected script has been executed.") column 11 lines 36-44 ("Another prior art system combines the teachings of the remote access systems and the remote power-up systems by providing a remote power-up device that

is triggered by a phone call, and which "boots" a computer system...") column 2 lines 59-62).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the dual-tone multi-frequency signal as taught by Carmello et al. with remote client / server as taught by Nouri et al., as modified by lavergne et al., for the purpose of using a telephone ring tone to trigger an event.

Regarding claim 17, and as applied to claim 9 above, Nouri et al., as modified by lavergne et al., further discloses a system of a remote control server that requires authentication (("The previously entered password (at state 273) is sent to the remote interface 104 to identify the user at the local computer 122.") Nouri et al., column 14 lines 4-6). However, Nouri et al., as modified by lavergne et al., fails to teach a controlling unit of a plurality of remote devices. Carmello et al. discloses a controlling unit of a plurality of remote devices (("The information stored in the Raw Access Log 114 and the Organized Database 122 is used by the Database Decision Module 116 to determine whether to trigger a specific host system 10 to connect to the Internet by dialing a phone number associated with the system.") column 12 lines 43-47).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the controlling of a plurality of remote devices as taught by Carmello et al. with the user authentication as taught by Nouri et al., as modified by lavergne et al., for the purpose of a remote controlling unit of a

plurality of devices that require user authentication. The Windows operating system, as far back as Windows NT (1997) and Windows 2000 (2000), has used a domain controller that authenticates users logging into clients on a domain.

Regarding claim 18, and as applied to claim 9 above, Nouri et al., as modified by lavergne et al., further discloses a system of remote control comprising a modem (("A remote interface board connects to the server and interfaces to the server modem.")

Nouri et al., column 5 lines 19-20). However, Nouri et al., as modified by lavergne et al., fails to teach a telephone network accessing unit in standby mode while power to a system is deactivated. Carmello et al. discloses a system whose power can be activated by a telephone call (("The remote power-up systems include a circuit which detects a telephone call and applies power to the host computer.") column 1 lines 49-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a telephone call triggering power as taught by Carmello et al. with a system of remote control using a modem as taught by Nouri et al., as modified by lavergne et al., for the purpose of using a telephone ring tone to trigger an event.

Regarding claim 19, Nouri et al. discloses a system comprising a server with remote control capability and stored user IDs (passwords). This reads on the claimed "A remote control server that is connected to a user terminal via an Internet, comprising: a user information database to store user information, wherein the user information comprises a stored ID (identifier) and a stored password; an internet accessing unit to

Art Unit: 2443

access the Internet, to compare the user information with an inputted ID and an inputted password ..." (column 13 lines 44-63). However, Nouri et al. fails to teach a plurality of client devices and a corresponding telephone number database or DTMF. Carmello et al. discloses a system comprising a database for storing telephone numbers that are assigned to a plurality of clients. This reads on the claimed "... a telephone number database to store a plurality of assigned telephone numbers that correspond to the plurality of electronic appliances; a telephone signal transmitting unit to transmit a telephone signal to the plurality of electronic appliances; an internet accessing unit to access the Internet; and a server controlling unit to retrieve one of the plurality of assigned telephone numbers corresponding to one of the plurality of electronic devices from the telephone number database and to control the telephone signal transmitting unit, to compare the user information with an inputted ID and an inputted password, wherein a user controls power to the plurality of electronic appliances via the user terminal." (("The information stored in the Raw Access Log 114 and the Organized Database 122 is used by the Database Decision Module 116 to determine whether to trigger a specific host system 10 to connect to the Internet by dialing a phone number associated with the system.") column 12 lines 43-47) and a system wherein the triggering circuit has the ability to transmit DTMF tones. This reads on the claimed "...wherein the telephone signal comprises a ring signal or a DTMF (dual-tone multifrequency) signal." (("In addition, the advanced ring detection and triggering circuit 16A has the ability to transmit DTMF (Dual Tone Multi-Frequency) tones back onto the phone line 24 in order to signal the remote user that the triggering operation has been

Page 21

Art Unit: 2443

carried out by the host system 10.") column 9 lines 12-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the system comprising the database of phone numbers corresponding to a plurality of clients and DTMF as taught by Carmello et al. with the system comprising a server with remote control capabilities and a database of user IDs (passwords) as taught by Nouri et al. for the purpose of a server, comprising a local terminal, a user (password) database and a database of telephone numbers that are assigned to unique clients, remotely controlling a plurality of clients remotely via the internet or a modem. In the related field of endeavor, client / server systems the unix operating system can remotely access one another via the TCP/IP protocol over the internet or the KERMIT program using modems. However, Nouri et al., as modified by Carmello et al., fails to disclose a system comprising a server with remote control capability comprising a remote user terminal. lavergne et al. discloses a browser enabled remote user interface (("The present invention provides a remote user interface system that will allow a remote browser application to monitor and control the power system from anywhere in the world. The interface system further supports a local user interface, such as in the form of a liquid crystal display screen and touchpad interface, to provide the same information that is available through the remote browser. Preferably the local interface and the remote browser interface are configured as a series of menu screens providing both static and dynamic (real-time) information. Preferably the screens of the remote browser interface and the local interface are of the same or similar layout so that the

user of the remote browser interface will be familiar with the local interface, and vice versa.") column 2 lines 5-18).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a browser enabled remote user interface as taught by lavergne et al. with a system comprising a server with remote control capability as taught by Nouri et al., as modified by Carmello et al, for the purpose of a remote control communications system.

Response to Arguments

8. Applicant's arguments filed 18 November 2008 with respect to claims 1, 3, 7-8, 10-11, and 13-18 have been considered but are not persuasive.

Applicant argues that in claim 1, Nouri, lavergne, and Carmello, taken separately or in combination, do not disclose, teach, or suggest at least, "a remote control server to communicate with the remote user terminal through an Internet"

Examiner respectfully disagrees. Nouri et al. discloses a system for resetting a server comprising a remote control server and a remote user terminal (("The inventive remote access system provides system administrators with new levels of client/server system availability and management. It gives system administrators and network managers a comprehensive view into the underlying health of the server--in real time, whether on-site or off-site. In the event of a failure, the invention enables the

administrator to learn why the system failed, why the system was unable to boot, and to control certain functions of the server from a remote station.") Nouri et al., column 3 lines 45-54).

Applicant argues that in claim 1, Nouri, lavergne, and Carmello, taken separately or in combination, do not disclose, teach, or suggest at least, "a server controlling unit to read out the proper telephone number of the electronic appliance according to a selection by a user making an access thereto"

Examiner respectfully disagrees. Carmello et al. discloses a system and method for triggering actions at a host computer by telephone wherein a server controlling unit to read out the proper telephone number of the electronic appliance, wherein a user making an access thereto through the Internet from the remote user terminal (("The system according to FIG. 1A operates as follows. The remote user dials the phone number of the phone line 24 associated with the host computer system 10, causing a ring signal on the phone line 24. The ring detection circuit 34 of modem 22 detects the ring signal and passes this signal on to the trigger circuit 16. The trigger circuit 16 detects the ring signal from the ring detector 34 and generates the trigger signal to the host computer system 10 via the host computer system's serial port 36. The control monitor program 12 then detects the trigger signal on serial port 36 and causes the activation program 14 to be executed. The activation program 14 creates a connection

Art Unit: 2443

through the modem 22 and ISP 26 to the Internet 28. The remote user can then make a connection to the host system 10 over the Internet 28 using local computer 32.") Carmello et al., column 7 lines 8-22); access thereto through the Internet from the remote user terminal (("After the control monitor program 12 has executed the selected script 14, a signal is sent to the advanced control unit 16A indicating that a script has been triggered. The microcontroller 100 receives this signal and then transmits a specific tone or sequence of tones using the DTMF transceiver 96 and DAA circuit 90 back onto the phone line 24, indicating to the remote user that the selected script has been executed. In the preferred embodiment, the script 14 creates a connection between the host system 10 and the Internet 28, using an internal communications device (not shown) connected to the host system 10. The internal communications device could be another analog modem, or could be an ISDN digital communications device, and is connected over a phone line to an ISP, so as to create a connection to the Internet.") Carmello et al., column 11 lines 36-50); and a telephone number of the electronic appliance from the telephone number database (("The information stored in the Raw Access Log 114 and the Organized Database 122 is used by the Database Decision Module 116 to determine whether to trigger a specific host system 10 to connect to the Internet by dialing a phone number associated with the system. The Database Decision Module 116 examines the destination information stored in the Raw Access Log 114 and compares it with the information stored in the Organized Database 122. If destination information is detected which corresponds to a customer of the ISP referenced in the Organized Database 122, the Database Decision Module extracts the

Page 24

phone number of the host system 10 to be triggered from the Organized Database 122. The ISP server computer then dials the phone number associated with the customer's host computer system 10, using one of the modem's in the server modem pool 120, thus creating a ring signal on the phone line 24 connected to the host computer system 10. As depicted in FIGS. 1A, and 3A, this ring signal is detected by the host computer system 10, and causes an activation script 14 stored at the host computer system to be executed, wherein the activation script 14 creates a connection between the host computer system 10 and the Internet 28. Following the establishment of this connection, data packets designated for the customer's host computer system 10, can thereafter be routed to the host system. ") Carmello et al., column 12 lines 43-67).

Applicant argues that in claim 1, Nouri, lavergne, and Carmello, taken separately or in combination, do not disclose, teach, or suggest at least, "to control the telephone signal transmitting unit to supply the DTMF signal to the telephone network accessing unit of the selected electronic appliance based on a user input from the remote user terminal so that power of the selected electronic appliance is enabled"

Examiner respectfully disagrees. Carmello et al. discloses a system and method for triggering actions at a host computer by telephone wherein a telephone ring signal is capable of remotely powering up a system (("Previous systems for controlling a host computer system over a telephone connection are limited to two basic concepts: (1)

Art Unit: 2443

remote power-up; and (2) remote access. The remote power-up systems include a circuit which detects a telephone call and applies power to the host computer. According to these prior art systems a telephone ring detector and power switch are interposed between the power outlet and the remote computer system to be activated. When a telephone call is detected on the phone line connected to the ring detector, the power switch is activated and the host computer's power supply is connected to the power outlet. One disadvantage of these prior art systems is that they are limited to simply powering up the computer. These systems do not provide any mechanism, signal, or intelligence which causes the host computer to perform a sequence of predetermined actions based on the detection of the phone call.") Carmello et al., column 1 lines 46-63); comprising DTMF format signalling (("Signal conditioning circuits 92 convert the differential signals required for use by the DAA 90 into single ended signal levels compatible with the dual tone multi-frequency (DTMF) transmitter and receiver 94. The DTMF transceiver 94 receives signals from the DAA 90 in DTMF format and converts the signals into a digital format for transmission to the microcontroller 100 over databus 96. Likewise, the DTMF transceiver 94 receives a digital signal from the microcontroller 100 over databus 96 and converts the digital signal into a DTMF signal for transmission to the DAA circuit 90 which then asserts the DTMF tones onto the phone line 24. In this manner the microcontroller 100 can both send and receive standard DTMF signals on the external phone line 24.") Carmello et al., column 10 lines 6-20).

Page 26

Art Unit: 2443

Applicant argues that in claim 1, Nouri, lavergne, and Carmello do not disclose any technical features of the present invention and any configuration to accomplish these technical features. In particular, the cited references do not disclose that a user can control electronic appliances using the Internet as well as the telephone network without a separate network by each electronic appliance, by using a remote control server comprising a remote control user terminal accessible thereto through the Internet and a server controller.

Examiner respectfully disagrees. lavergne et al. discloses a browser-enabled remote user interface for telecommunications power system comprising networked connections via the Internat and telephone lines (("The master control unit is coupled through a suitable interface to a computer network such as the Internet. In FIG. 1 the network has been generically illustrated at 36 and the master control unit is shown connected through a telephone interface jack 38 to the telecommunications unit 26. While a telephone connection has been illustrated here, it will be appreciated that the master control unit could be connected to network 36 by other types of connections.") lavergne et al., column 3 lines 48-55).

Applicant argues that in claim 3, Nouri, lavergne, and Carmello, taken separately or in combination, do not disclose, teach, or suggest at least, "allowing a user to access

to enable a power thereof by reading out the stored proper telephone number of the electronic appliance that is selected according to a selection of power control of the electronic appliance by the user accessing the remote control server from a remote user terminal through the Internet and by supplying both a ring signal and a DTMF (dual-tone multi-frequency) signal to the selected electronic appliance having the proper telephone number through a telephone network," as recited in claim 5. Therefore, for at least these reasons, claim 5 is patentably distinguishable from the cited references.

Examiner respectfully disagrees. Carmello et al. discloses a system and method for triggering actions at a host computer by telephone comprising both a ring signal and a DTMF signal (("These advanced features are carried out using the following circuit components: (1) solid state data access arrangement (DAA) 90; (2) signal conditioning circuits 92; DTMF transmitter and receiver 94; microcontroller 100; and TTL/RS232 level converter 102. The solid state DAA 90 includes ring detector 34, which detects a ring signal on the phone line 24 and asserts the External Ring Indicator signal 54 to the microcontroller 100. The solid state DAA 90 also provides standard interface and isolation circuitry required by the FCC for communication over a telephone line.")

Carmello et al., column 9 line 63 – column 10 line 5).

Applicant argues that in claims 7-8, Nouri, lavergne, and Carmello, taken

Art Unit: 2443

separately or in combination, do not disclose, teach, or suggest at least, "wherein a user controls power to the plurality of electronic appliances via the remote user terminal, and wherein the remote control server comprises:.., a telephone signal transmitting unit to transmit both a ring signal and a DTMF (dual-tone multi- frequency) signal to the plurality of electronic appliances based on input from the remote user terminal to control the power to the plurality of electronic devices," as recited in claim 9. Therefore, for at least these reasons, claim 9 is patentably distinguishable from the cited references.

Examiner respectfully disagrees. Carmello et al. discloses a system and method for triggering actions at a host computer by telephone wherein a remote system is powered up via a telephonic ring tone (("Previous systems for controlling a host computer system over a telephone connection are limited to two basic concepts: (1) remote power-up; and (2) remote access. The remote power-up systems include a circuit which detects a telephone call and applies power to the host computer.

According to these prior art systems a telephone ring detector and power switch are interposed between the power outlet and the remote computer system to be activated. When a telephone call is detected on the phone line connected to the ring detector, the power switch is activated and the host computer's power supply is connected to the power outlet. One disadvantage of these prior art systems is that they are limited to simply powering up the computer. These systems do not provide any mechanism, signal, or intelligence which causes the host computer to perform a sequence of predetermined actions based on the detection of the phone call.") Carmello et al.,

Art Unit: 2443

column 1 lines 46-63).

Applicant argues that in claims 10-11 and 13-18, Nouri, lavergne, and Carmello, taken separately or in combination, do not disclose, teach, or suggest at least, "an internet accessing unit to access the Internet to communicate with the remote user terminal;...wherein a user controls power to the plurality of electronic appliances via the remote user terminal by causing the telephone signal transmitting unit to transmit both the ring signal and the DTMF signal to the plurality of electronic devices based on user input to the remote user terminal," as recited in claim 19. Therefore, for at least these reasons, claim 19 is patentably distinguishable from the cited references.

Examiner respectfully disagrees. Nouri et al. discloses a system for resetting a server comprising several Internet access devices, such as modems or network interface cards (("In another embodiment, the server modem to client modem connection may be implemented by an Internet connection utilizing the well known TCP/IP protocol. Any of several Internet access devices, such as modems or network interface cards, may be utilized. Thus, the communications network 127 may utilize either circuit or packet switching.") Nouri et al., column 7 lines 38-45).

Art Unit: 2443

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be faxed to (571) 273-8300 or mailed

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

to:

Hand-delivered responses should be brought to

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2443

Examiner should be directed to Mark Fearer whose telephone number is (571) 270-1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Mark Fearer /M.D.F./ February 2, 2009

/George C Neurauter, Jr./

Primary Examiner, Art Unit 2443